

REMARKS

Claims 1-7, and 9, appear in this application for the Examiner's review and consideration.

Claim 1 has been amended to recite the limitations of claim 8.

Claim 8 has been cancelled without prejudice to Applicants' right to file one or more continuing applications directed to any subject matter not presently claimed.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claim 9 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the use of "may". "May" has been deleted and replaced by "is able to".

The rejection under 35 U.S.C. § 112, second paragraph, is therefore believed to have been overcome. Applicants respectfully request reconsideration and withdrawal thereof.

Rejection Over MacKay, Jr. et al. In View of Galloway et al.

Claims 1-9 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,904,628 issued to MacKay Jr. et al. (MacKay), in view of U.S. Patent No. 6,354,962 to Galloway et al. (Galloway).

MacKay and Galloway are both directed to metal wood type golf club, commonly referred to as "drivers". MacKay teaches the use of a bladder inflation method to reinforce the casing walls of the driver head with a lighter weight material. On Col. 9, lines 46-59, there is a description of the material, wherein it is stated that resilient, flexible materials are most preferred and substantially rigid materials are least preferred. MacKay discloses a golf club head that is designed to be used only as a driver and the internal core that is pressurized functions as a support to the extremely thin shell of the driver club head. The present day drivers strive to increase in size (up to 460cc). Galloway specifically states that it is more preferably that the volume of the club head be 400 cc.

MacKay does not discuss density of the material nor is the internal volume addressed, which are essential to the claims of the Applicants. Based on the MacKay drawings, the internal volume of the MacKay club would be at least 150 cc. for a fairway

wood. Galloway's patent relates to the "Big Bertha" driver which could never be confused with an iron hybrid.

The stiffness of the front face progressively becoming more flexible away from the face center is an important design feature of the present invention. However, the inventive concept of the present invention is in the introduction of an inflated composite core creating an internal volume between 35cc to 50cc. and having the core maintain enough rigidity to be employed as a covering for the rear cavity. Applicants have cancelled claim 8 and incorporated its' limitations into amended claim 1, because it is an important inventive weighting concept that the composite core forms the visible rear portion of the club head. The reason for citing 35cc to 50cc as the internal volume is to differentiate this club head from the with fairway wood type clubs. This is an "Iron-Hybrid" and is designed to replace 2, 3 and 4 irons, which are perceived by average golfers to be harder to hit than fairway type woods. This hybrid is a cross between a long iron and a fairway metal wood, and therefore is perceived to be easier to hit than the long iron because of an increased sweet spot area. It would have not been obvious for Galloway or MacKay to modify their clubs to 35 to 50cc volume, because it would defeat the entire goal for there clubs which s to make the club as large as possible.

The Galloway patent specifically states a volume between 175 cubic centimeters to 400 centimeters and teaches away from a hybrid club by stating that the 400 cc volume is more preferable. Neither the Galloway nor the MacKay patents teach of having the inflated composite core form the rear wall of the club. This is the only club that does this, and Golf Digest Magazine's 2005 Hot List for the best iron type hybrid golf clubs gives it a perfect 100 rating, the only hybrid to achieve this rating. (Copy included in the appendix.) The Applicants feel that it is the above discussed innovative club features which are responsible for this success. The inclusion of the tungsten screw has not been claimed since the placement of weighted screws in the sole of a golf club has been seen in the prior art.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the

reasonable expectation of success must be found in the prior art, not in Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Galloway fails to cure the deficiencies of MacKay. There is no motivation to modify the references or any reasonable expectation of success in their combination in that neither of their clubs could be made into hybrids.

In their quest to make a larger head golf club, both Galloway and MacKay teach away from the golf club claimed in the present invention

It is well held that a *prima facie* case of obviousness can be rebutted if Applicant can show that the cited reference, in any material respect, teaches away from the claimed invention. *In re Geisler*, 116 F.3d 1465, 43 U.S.P.Q.2d 1362, 1365 (Fed. Cir. 1997). The reference may further be said to teach away when a person of ordinary skill in the art, upon reading the reference, would be led in a direction divergent from the path that was taken by Applicant. *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 1360, 52 U.S.P.Q.2d 1294, 1298 (Fed. Cir. 1999).

The rejection under 35 U.S.C. § 103(a) is believed to have been overcome for at least the above reasons. Applicants respectfully request reconsideration and withdrawal thereof.

Conclusion

Based on the remarks set forth above, Applicants believe that all of the rejections have been overcome and the claims of the subject application are in condition for allowance. Should the Examiner have any further concerns or believe that a discussion with the Applicants' agent would further the prosecution of this application, the Examiner is encouraged to call the agent at the number below.

No fee is believed to be due for this submission. However, should any required fees be due, please charge them to Acushnet Company Deposit Account No. 502309.

Respectfully submitted,



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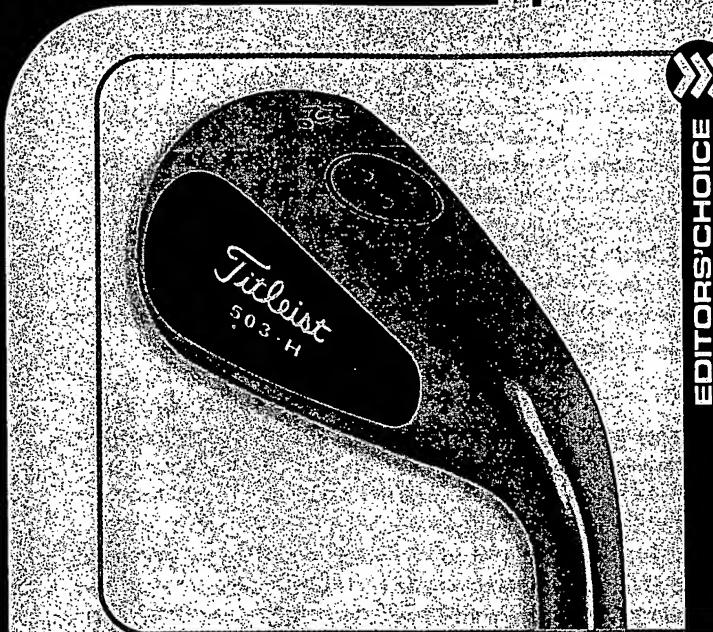
February 23, 2005
Date

Customer Number: 40990

Golf Digest

THE HOT 20
LIST 05

IRON-LIKE HYBRID



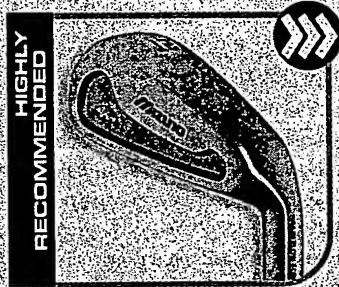
TITLEIST 503.H

Score: 100.0. Loft: 19, 22. Street price: \$225 (graphite shaft), titleist.com.

■ **What the company says:** A tungsten screw in the sole lowers the center of gravity. The thin-face design is supported by a carbon composite-filled cavity. Saved weight in the thin face is redistributed at the perimeter and sole to enhance forgiveness and elevate trajectory. It is designed to launch lower and spin less than a comparable fairway wood, but launch higher and spin more than a comparable long iron. Available with an 85-gram Aldila NV hybrid graphite shaft. Length is one to two inches shorter than a comparable fairway wood and a half-inch longer than a long iron.

■ **What our panelists say:** "The look inspires confidence. I found myself going after it a little more with this club than with the others."

■ **What THE JUDGES say:** "Of the iron-like hybrids we sampled, this is the only one that tries to do something technologically adventurous with materials. We applaud the effort and the execution. Even better, the technology doesn't sacrifice the design. It maintains a clean look, which is vital in this category, and the firm thump at impact is a sound of strength."



MIZUNO FLI-HI

Score: 97.8. Loft: 18, 21, 24. Street price: \$160 (graphite), mizunousa.com.

■ **What the company says:** It's a hollow iron with three thicknesses in the face to improve feel and flexibility. The patented grain-flow forged 4135 stainless-steel face and neck are mated to a wider sole that features a unique negative bounce angle to improve turf-club interaction. Modified U-

shape grooves are designed to optimize spin rate.

■ **What our panelists say:** "It's more forgiving than I expected. I hit a couple of fat shots that still carried well. All types of players can use this."

■ **What THE JUDGES say:** "Mizuno embraces technology that is equal parts materials and real-world application. The forged-feeling 3-iron is truly hittable off the ground. How cool is that?"

PING G2 HL

Score: 97.6. Loft: 17, 20, 23, 26. Street price: \$120 (graphite), pinggolf.com.

■ **What the company says:** The extra-wide sole (compared to the regular G2 iron) and the undercut cavity design move the center of gravity down and away from the face. A wide sole prevents digging; it features the same rounded, multiple-radius leading edge that's present on the G2 iron.

■ **What our panelists say:** "It's easy to hit, and it looks good at address. I like the fact that it matches the rest of the set, which makes looking down at it less of a distraction."

■ **What THE JUDGES say:** "Most iron-like hybrids seem to be reserved exclusively for tour-level games, but here's one that thankfully is built for the Everyman."



CLEVELAND LDI

Score: 91.6. Loft: 18, 21. Street price: \$150 (graphite), clevelandgolf.com.

■ **What the company says:** The hollow iron design allows the center of gravity to be moved low and away from the face. It has a slightly wider sole compared to a traditional blade iron.

■ **What our panelists say:** "It takes a minute to get used to the look, but it's a great club to use as

a driving iron. The distance is good, and it produces a penetrating trajectory."

■ **What THE JUDGES say:** "This meaty-looking club is suitable for the slightly civilized caveman. Still, with a thinner sole and a sleeker profile than almost all other hybrids, this club is for a select few players. If you're not thinking about Q school, look elsewhere."